

Message

---

**From:** Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]  
**Sent:** 7/11/2018 1:33:59 PM  
**To:** Washington, John [Washington.John@epa.gov]; Buckley, Timothy [Buckley.Timothy@epa.gov]; Riedel, Theran [Riedel.Theran@epa.gov]; Offenberger, John [Offenberger.John@epa.gov]; Lindstrom, Andrew [Lindstrom.Andrew@epa.gov]  
**CC:** Pierce, Tom [Pierce.Tom@epa.gov]; Hubal, Elaine [Hubal.Elaine@epa.gov]; Medina-Vera, Myriam [Medina-Vera.Myriam@epa.gov]; Kaushik, Surender [Kaushik.Surender@epa.gov]; Schumacher, Brian [Schumacher.Brian@epa.gov]; Biales, Adam [Biales.Adam@epa.gov]; Weber, Eric [Weber.Eric@epa.gov]  
**Subject:** RE: TSCA Inspection - PFAS Chemical

John,

On question 1 I do not know. However I expect a catalyst is needed as PTFE is made out of tetrafluoroethylene. The double bond at the end is key.

For question 2 I expect the PPVE would not ionize in LC ESI MS. I expect you would need GC/EI MS.

This mixture of chemicals and potential outputs is comparable to what we saw in Fayetteville, NC. It's very complicated and leads to many side products being formed if synthesis is similar at this location. A synthetic organic chemist could answer that question more concretely.

Mark

---

**From:** Washington, John  
**Sent:** Wednesday, July 11, 2018 8:11 AM  
**To:** Strynar, Mark <Strynar.Mark@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Riedel, Theran <Riedel.Theran@epa.gov>; Offenberger, John <Offenberger.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>  
**Cc:** Pierce, Tom <Pierce.Tom@epa.gov>; Hubal, Elaine <Hubal.Elaine@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Kaushik, Surender <Kaushik.Surender@epa.gov>; Schumacher, Brian <Schumacher.Brian@epa.gov>; Biales, Adam <Biales.Adam@epa.gov>; Weber, Eric <Weber.Eric@epa.gov>  
**Subject:** RE: TSCA Inspection - PFAS Chemical

Eric Weber drew the same structures based on the Toxnet description. Two things that are a curiosity:

- 1) Eric was curious about how the perfluoropropyl vinyl ether might polymerize;
- 2) I am curious about whether the perfluoropropyl vinyl ether might be ionized in LC/ESI/MS, or do you think it will need GC/CI/MS?

John

---

**From:** Strynar, Mark  
**Sent:** Wednesday, July 11, 2018 8:00 AM  
**To:** Buckley, Timothy <Buckley.Timothy@epa.gov>; Washington, John <Washington.John@epa.gov>; Riedel, Theran <Riedel.Theran@epa.gov>; Offenberger, John <Offenberger.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>  
**Cc:** Pierce, Tom <Pierce.Tom@epa.gov>; Hubal, Elaine <Hubal.Elaine@epa.gov>; Medina-Vera, Myriam <Medina-

Vera.Myriam@epa.gov>; Kaushik, Surender <Kaushik.Surender@epa.gov>; Schumacher, Brian <Schumacher.Brian@epa.gov>; Biales, Adam <Biales.Adam@epa.gov>

**Subject:** RE: TSCA Inspection - PFAS Chemical

FYI,

Here is what Scifinder shows for this CAS number (35397-13-8). They are using PPVE (perfluoropropyl vinyl ether) (1623-05-8) along with trifluo, monochloro ethylene (CAS 79-38-9) and ethylene (CAS 74-85-1) to made the said polymer. FYI, Chemours in Fayetteville, NC makes the PPVE as well. This will help us understand potential products to look for.

Mark

Substance Information "35397-13-8" > substances (1)

**SUBSTANCES**

Get References Get Reactions Get Chemical Structures Tools

Sort by: CAS Registry Number

1 of 1 substance selected

1. 35397-13-8

1623-05-8  
C<sub>4</sub>F<sub>8</sub>O

79-38-9  
C<sub>2</sub>ClF<sub>2</sub>

74-85-1  
C<sub>2</sub>H<sub>4</sub>

Chemical structures are displayed for each monomer.

(C<sub>4</sub>F<sub>8</sub>O, C<sub>2</sub>H<sub>4</sub>, C<sub>2</sub>ClF<sub>2</sub>).  
Prepared: 1,1,1,2,2,3,3-heptafluoro-3-[(1,2,2-trifluoroethoxy)oxy], polymer with 1-chloro-1,2,2-trifluoroethane and ethene

Regulatory Information

Copyright © 2018 American Chemical Society. All Rights Reserved. | 10.1021/acs.chem.8b00000

**From:** Buckley, Timothy

**Sent:** Tuesday, July 10, 2018 3:49 PM

**To:** Strynar, Mark <Strynar.Mark@epa.gov>; Washington, John <Washington.John@epa.gov>; Riedel, Theran <Riedel.Theran@epa.gov>; Offenberger, John <Offenberger.John@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

**Cc:** Pierce, Tom <Pierce.Tom@epa.gov>; Hubal, Elaine <Hubal.Elaine@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Kaushik, Surender <Kaushik.Surender@epa.gov>; Schumacher, Brian <Schumacher.Brian@epa.gov>; Biales, Adam <Biales.Adam@epa.gov>

**Subject:** FW: TSCA Inspection - PFAS Chemical

See below follow-up from our discussion with OECA this morning.

Tim

Timothy J. Buckley, PhD  
Director of the Exposure Methods & Measurements Division  
National Exposure Research Laboratory  
109 TW Alexander Drive  
Research Triangle Park, NC 27711

Email: [buckley.timothy@epa.gov](mailto:buckley.timothy@epa.gov)  
URL: <http://www.epa.gov/heasd/staff/buckley.html>  
Phone: (919) 541-2454 (O); FAX: -0239

Ex. 6 Personal Privacy (PP)

---

**From:** Miles, James  
**Sent:** Tuesday, July 10, 2018 3:16 PM  
**To:** Buckley, Timothy <[Buckley.Timothy@epa.gov](mailto:Buckley.Timothy@epa.gov)>  
**Cc:** Ellis, Tony <[Ellis.Tony@epa.gov](mailto:Ellis.Tony@epa.gov)>  
**Subject:** TSCA Inspection - PFAS Chemical

Tim –

Nice talking with you and your team today.

I wanted to get you some initial information on the chemical at issue.

The below public link will provide the TSCA section 5(e) Consent Order Agreement (sanitized version), the TSCA section 5 Significant New Use Rule (SNUR), and the TSCA section 8 Chemical Data Reporting (CDR) rule information for CAS # 35397-13-8.

<https://chemview.epa.gov/chemview?tf=2&ch=35397-13-8&su=2-5-6-7&as=3-10-9-8&ac=1-15-16-6378999&ma=4-11-1981377&tds=0&tdl=10&tas1=1&tas2=asc&tas3=undefined&tss=&modal=template&modalId=3554312&modalSrc=4&modalDetailId=&modalCdr=3554312>

James Miles, Chief  
Chemical Risk and Reporting Enforcement Branch  
Waste and Chemical Enforcement Division  
Office of Civil Enforcement  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
William Jefferson Clinton Bldg., South, Rm. 4111A  
1200 Constitution Ave., NW  
Washington, DC 20460  
202.564.5161  
[miles.james@epa.gov](mailto:miles.james@epa.gov)